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| 10/581,876 | 08/03/2006 | Dietrich H. W. Gronemeyer | GRONEMEYER ET AL-2PCT | 7387 |

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| EXAMINER | |
|---|---|
| MILLER, CHERYL L | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 3738 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/581,876 | GRONEMEYER ET AL. | |
| | Examiner | Art Unit | |
| | CHERYL MILLER | 3738 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *05 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/5/06, 8/3/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

It is noted by the examiner that several different embodiments are represented within the claims (and in the specification/drawings). If independent claim 1 is to become non-generic, dependent claims directed to different embodiments may be rendered indefinite, new matter, or lack of enablement as different embodiments are not disclosed or enabled to be combined, but instead are alternate embodiments. Please take careful note of this when and if amending the claims.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "individual layers" in line 4. There is insufficient antecedent basis for this limitation in the claim. It is unclear if these are the two or multiple layers or additional individual layers. If indeed applicant intended to refer to the two or multiple layers, the following change is suggested, "each of the two or multiple layers". Claims 4-13 depend upon claim 3 and inherit all problems with the claim. Similar errors occur in claims 4, 5, 7, 10, 11, 12, 14, and 15, wherein layers are termed, "different layers", "one layer", "at least two layers", "layers", etc. Again, if applicant intended to refer to the "two or multiple layers" language that distinguishes this should be present. For example, "each of the two or multiple layers", "one of the two or multiple layers" "the two or multiple layers".

Claim 8 recites the limitation "current paths" and "current path segments" in line 3. There is insufficient antecedent basis for this limitation in the claim. Support for *plural* current paths was not found in the claim of which this depends. Also support for current path segments was not found in the claim of which this depends. Similar problems exist with claims 9, 11, 12, and 13.

Claim 13 recites the limitation "the inductive resistors" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 16 recites the limitation the layers of "electrically conductive material" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 16 recites the limitation "intermediate layers" in line 5. There is insufficient antecedent basis for this limitation in the claim. It is unclear how *plural* intermediate layers are positioned between layers 2 and 3.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Alt et al. (US 6,767,360 B1). Alt discloses a medical implant (stent 10) having a deformable structural part (10) composed of multiple layers (15, 51, 50), whereby the layers (15, 50, 51) have different

electrical or magnetic properties (each is a different material and thickness, thus inherently different properties). Alt discloses the structural part (10) having an expandable framework (col.4, lines 51-55) formed by a plurality of metallic struts (21, 22, see in fig.1). Alt discloses the framework to have interruptions (area at 60, 65), such that current paths are closed (see fig.3). Alt discloses interruptions in different positions that do not lie on one another (interruptions at 60 and 65 of layer 50 do not lye on interruptions 12 of layer 15). Alt discloses a continuous current path from one end to another in a helix shape (see fig.3), further that two current path segments that are helices are formed (col.8, lines 45-56). Alt discloses current paths connected at a capacitor (73; fig.4). Alt shows the two current paths to have opposite rotation (seen in fig.3). Alt discloses the frequency to be equal to the frequency of the MR device (col.8, lines 9-12). Alt discloses an insulative intermediate layer (51) between conductive material (15, 50). Alt discloses a method of imaging comprising applying a paramagnetic contrast agent (col.7, lines 27-31) during the imaging process.

Claims 1-3 and 5-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Melzer et al. (US 6,280,385 B1, cited in IDS). See figures 3, 4b and respective portions of the specification. Melzer discloses a medical implant (stent 1) having a deformable structural part (2) composed of multiple layers (81, 82; fig.4b), whereby the layers (81, 82, 82) have different electrical or magnetic properties (inherent, as they are disclosed to be different materials). Melzer discloses the structural part (2) having an expandable framework (col.7, lines 22-29) formed by a plurality of metallic struts (see fig.3). Melzer discloses the framework (2) to have interruptions (91; shown in fig.3, 5), such that current paths are closed (path shown by arrows in fig.3). Melzer discloses a continuous current path from one end to another in a helix shape

(fig.3), further that two current path segments (one on each layer 82; col.9 line 65-col.10 line 4) that are helices are formed. Melzer discloses current paths connected at a capacitor (3; fig.2a-2g; col.7, lines 50-58). Melzer discloses the two current paths (fig.4b, each layer 82 has a helix) to have opposite rotation (figs.2a-2g show a switches showing both directions). Melzer discloses the frequency to be equal to the frequency of the MR device (col.8, lines 12-16). Melzer discloses an insulative intermediate layer (81; fig.4b) between conductive material (82's).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alt et al. (US 6,767,360 B1) in view of Unger (US 6,884,407 B1). Alt discloses a method of MR imaging a medical implant comprising applying a paramagnetic contrast agent near the medical implant in order to regulate the susceptibility of the tissues surrounding the medical implant (col.7, lines 25-34), however is silent to mention any particular contrast agents. Unger teaches in the same field as MR imaging, the use of ferrites as known contrast agents in the field of imaging (evidence of a known particular example) for providing a sufficient image of tissue (metal oxides, iron oxides, col.3, lines 35-59). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Unger's evidence of known specific contrast agents (ferrites) for MR imaging, with the MR imaging process of Alt in order to provide an image that distinguishes the tissue.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHERYL MILLER whose telephone number is (571)272-4755. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on (571) 272-4755. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Cheryl Miller/
Examiner, Art Unit 3738

/Corrine M McDermott/
Supervisory Patent Examiner, Art Unit 3738